FIG. 1

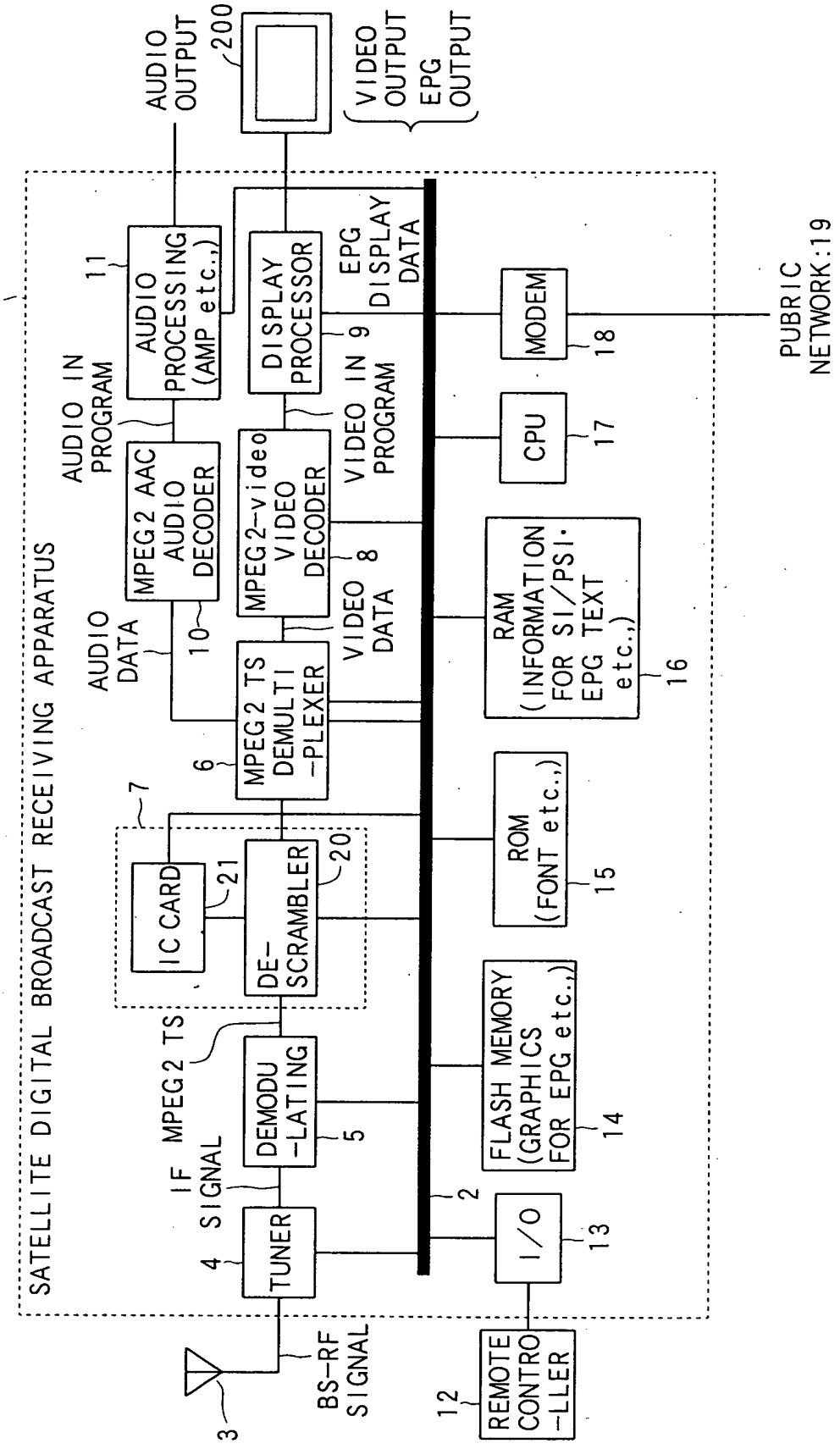

SATELLITE DIGITAL BROADCAST RECEIVING APPARATUS
1
AUDIO OUTPUT
200
VIDEO OUTPUT
EPG OUTPUT
AUDIO PROCESSING (AMP etc.,)
11
DISPLAY PROCESSOR
9
EPG DISPLAY DATA
AUDIO IN PROGRAM
MPEG2 AAC AUDIO DECODER
MPEG2-video VIDEO DECODER
VIDEO IN PROGRAM
MODEM
18
PUBRIC NETWORK:19
CPU
17
AUDIO DATA
10
VIDEO DATA
8
RAM (INFORMATION FOR SI/PSI· EPG TEXT etc.,)
16
MPEG2 TS DEMULTI -PLEXER
6
7
IC CARD
21
DE-SCRAMBLER
20
ROM (FONT etc.,)
15
IF MPEG2 TS SIGNAL
DEMODU -LATING
5
FLASH MEMORY (GRAPHICS FOR EPG etc.,)
14
4
TUNER
2
I/O
13
3
BS-RF SIGNAL
12
REMOTE CONTRO -LLER

FIG. 2

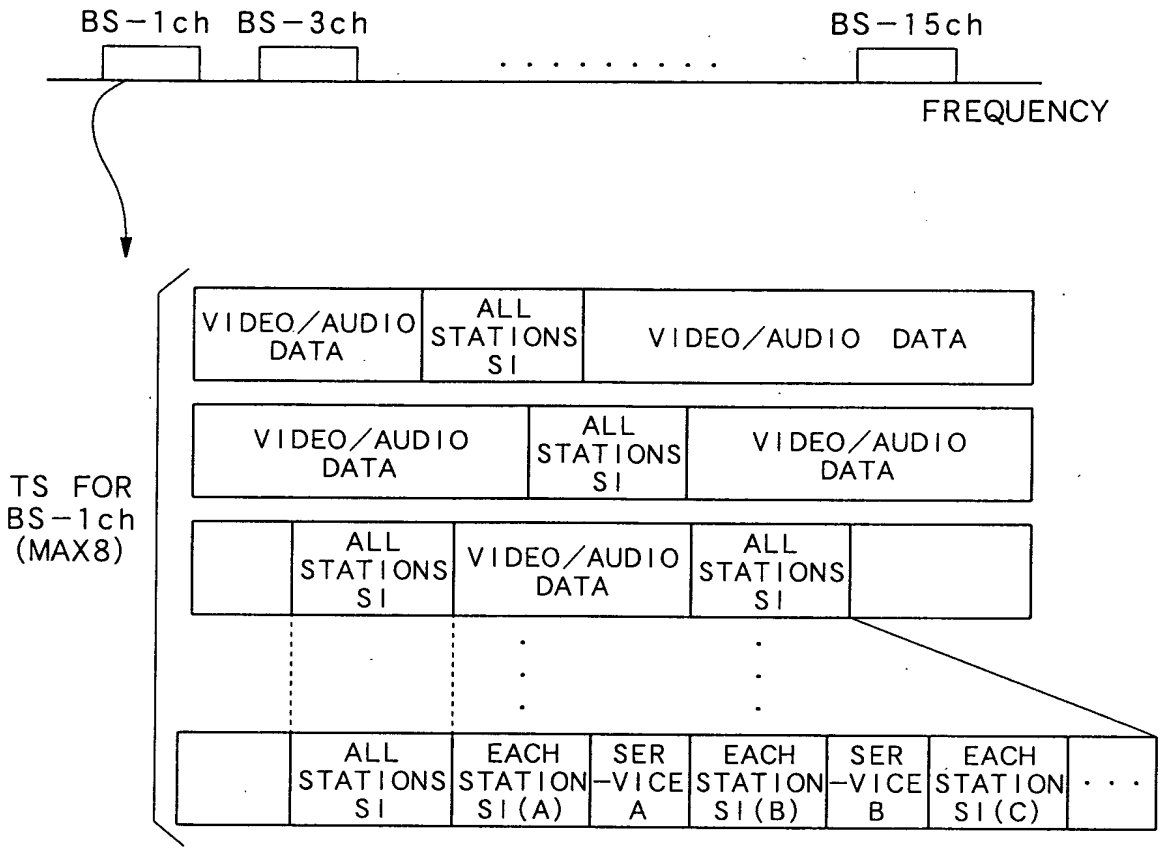

BS-1ch
BS-3ch
BS-15ch
FREQUENCY
TS FOR BS-1ch (MAX8)
VIDEO/AUDIO DATA
ALL STATIONS SI
VIDEO/AUDIO DATA
VIDEO/AUDIO DATA
ALL STATIONS SI
VIDEO/AUDIO DATA
ALL STATIONS SI
VIDEO/AUDIO DATA
ALL STATIONS SI
ALL STATIONS SI
EACH STATION SI(A)
SERVICE A
EACH STATION SI(B)
SERVICE B
EACH STATION SI(C)

FIG. 3

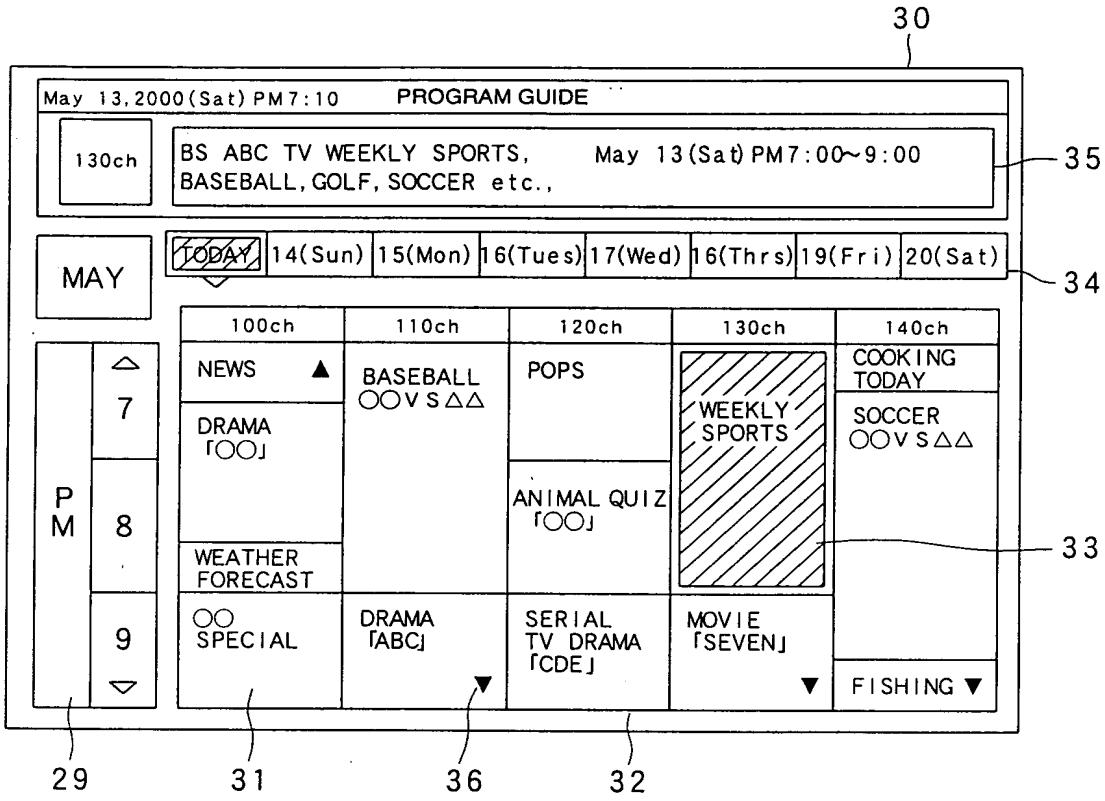

30
May 13,2000(Sat) PM7:10
PROGRAM GUIDE
130ch
BS ABC TV WEEKLY SPORTS, BASEBALL, GOLF, SOCCER etc.,
May 13(Sat) PM7:00~9:00
35
MAY
TODAY
14(Sun)
15(Mon)
16(Tues)
17(Wed)
16(Thrs)
19(Fri)
20(Sat)
34
100ch
110ch
120ch
130ch
140ch
PM
7
8
9
NEWS
DRAMA 「○○」
WEATHER FORECAST
BASEBALL ○○VS△△
POPS
ANIMAL QUIZ 「○○」
WEEKLY SPORTS
COOKING TODAY
SOCCER ○○VS△△
33
○○ SPECIAL
DRAMA 「ABC」
SERIAL TV DRAMA 「CDE」
MOVIE 「SEVEN」
FISHING
29
31
36
32

FIG. 4

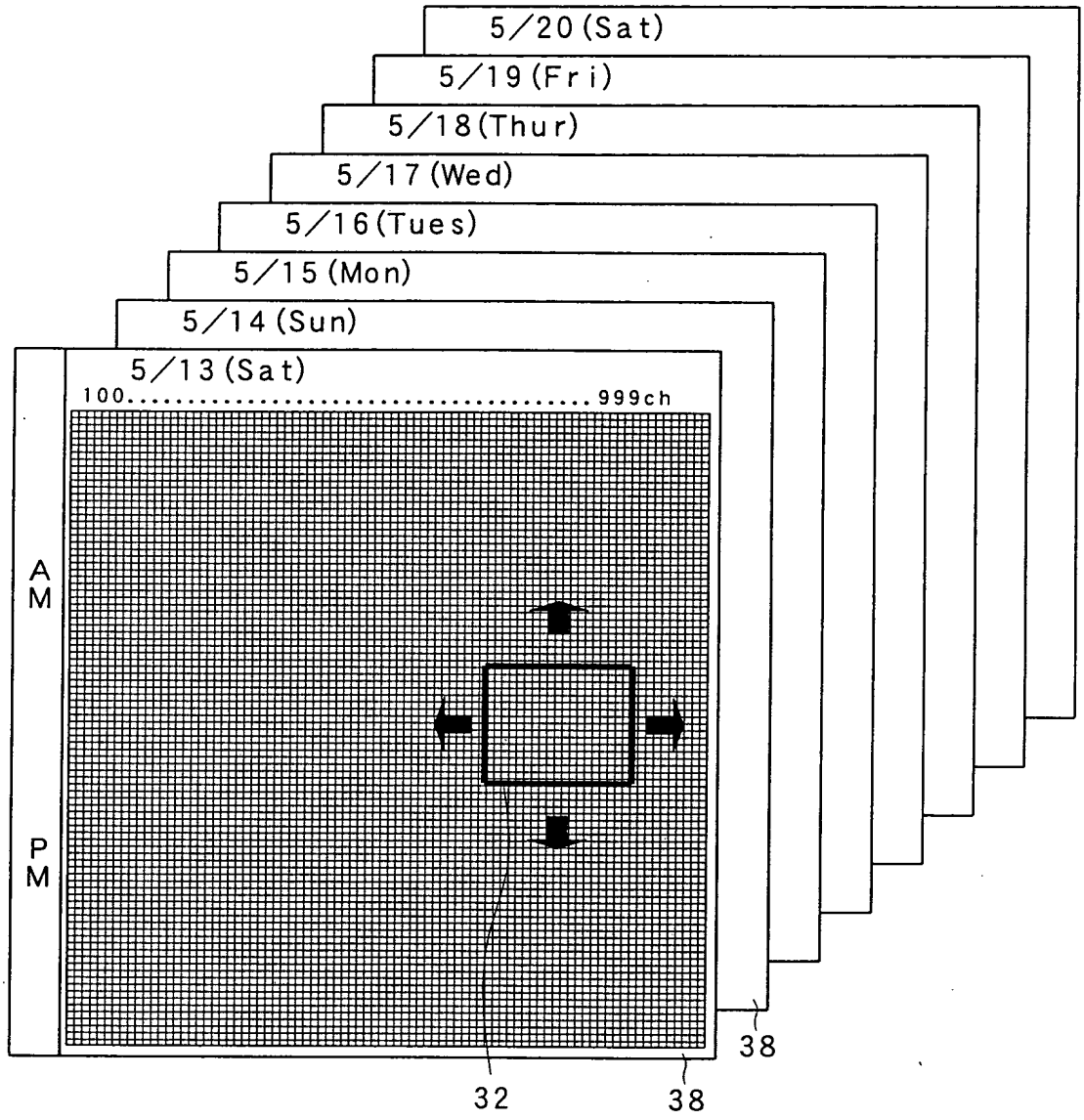

5/20 (Sat)
5/19 (Fri)
5/18 (Thur)
5/17 (Wed)
5/16 (Tues)
5/15 (Mon)
5/14 (Sun)
5/13 (Sat)
100.....999ch
AM
PM
38
32
38

FIG. 5

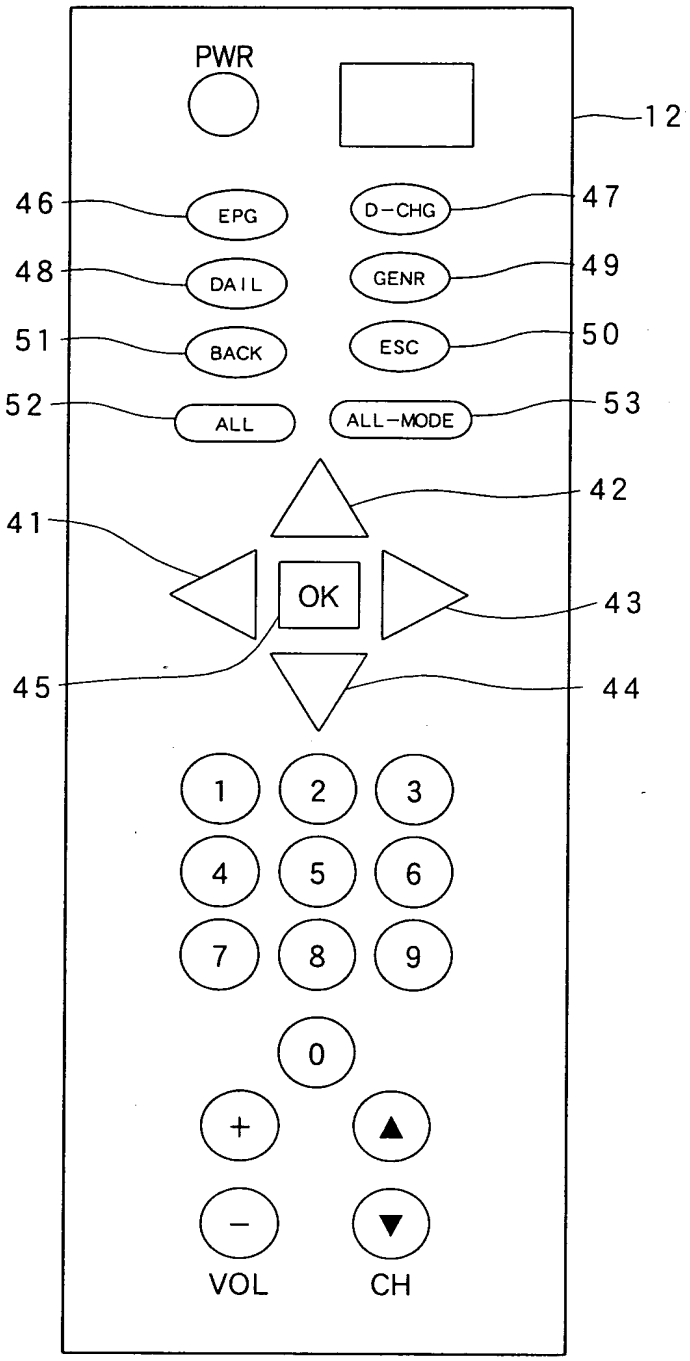

PWR
12
46
EPG
D-CHG
47
48
DAIL
GENR
49
51
BACK
ESC
50
52
ALL
ALL-MODE
53
42
41
OK
43
45
44
1
2
3
4
5
6
7
8
9
0
+
▲
−
▼
VOL
CH

FIG. 6

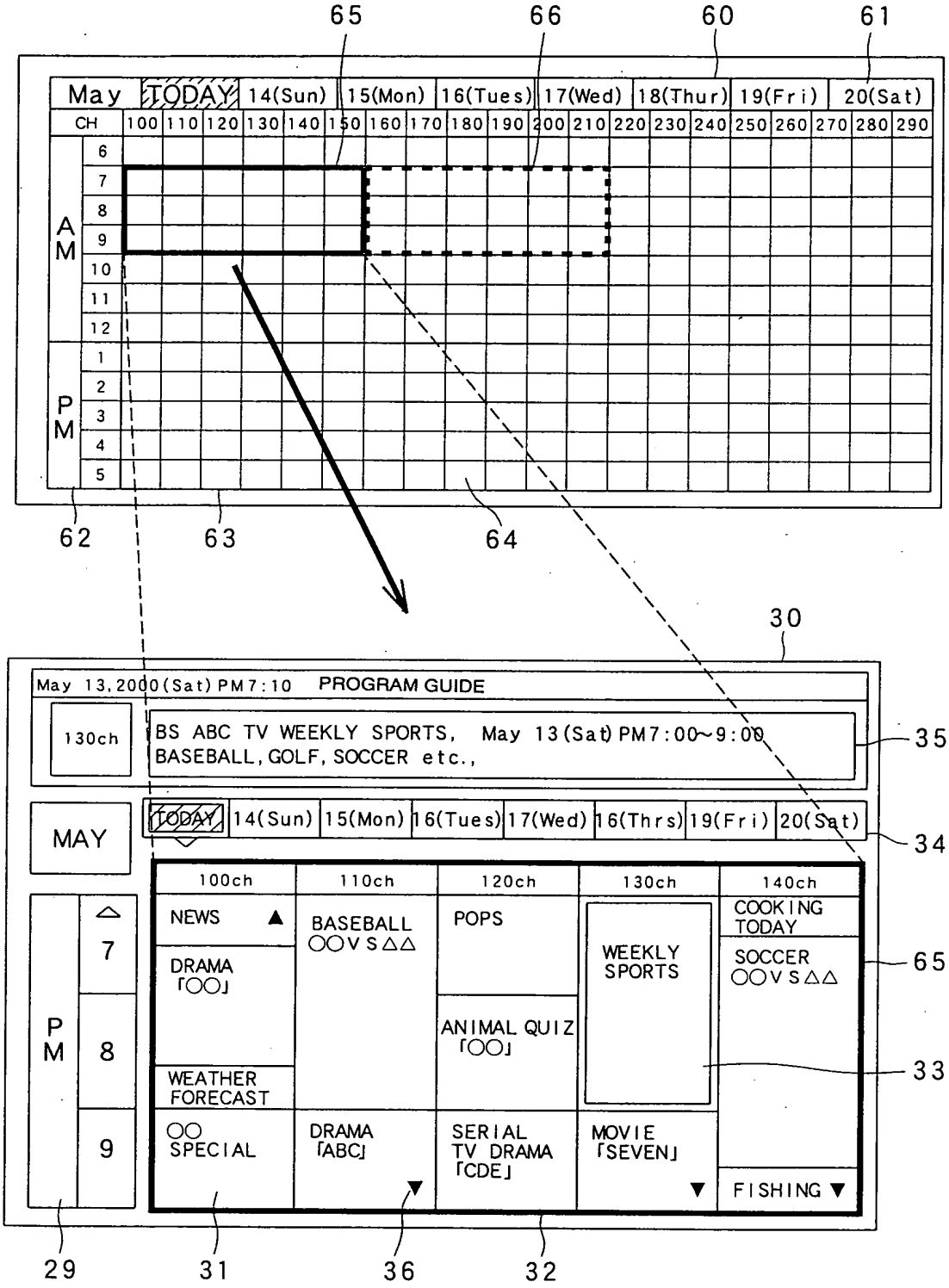

65
66
60
61
May
TODAY
14(Sun)
15(Mon)
16(Tues)
17(Wed)
18(Thur)
19(Fri)
20(Sat)
CH
100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290
AM
PM
6 7 8 9 10 11 12 1 2 3 4 5
62
63
64
30
May 13,2000(Sat) PM7:10 PROGRAM GUIDE
130ch
BS ABC TV WEEKLY SPORTS, May 13(Sat) PM7:00~9:00
BASEBALL, GOLF, SOCCER etc.,
35
MAY
TODAY
14(Sun)
15(Mon)
16(Tues)
17(Wed)
16(Thrs)
19(Fri)
20(Sat)
34
100ch
110ch
120ch
130ch
140ch
NEWS
DRAMA 「OO」
WEATHER FORECAST
BASEBALL OOVSΔΔ
POPS
ANIMAL QUIZ 「OO」
WEEKLY SPORTS
COOKING TODAY
SOCCER OOVSΔΔ
65
33
OO SPECIAL
DRAMA 「ABC」
SERIAL TV DRAMA 「CDE」
MOVIE 「SEVEN」
FISHING
7
8
9
29
31
36
32

FIG. 7

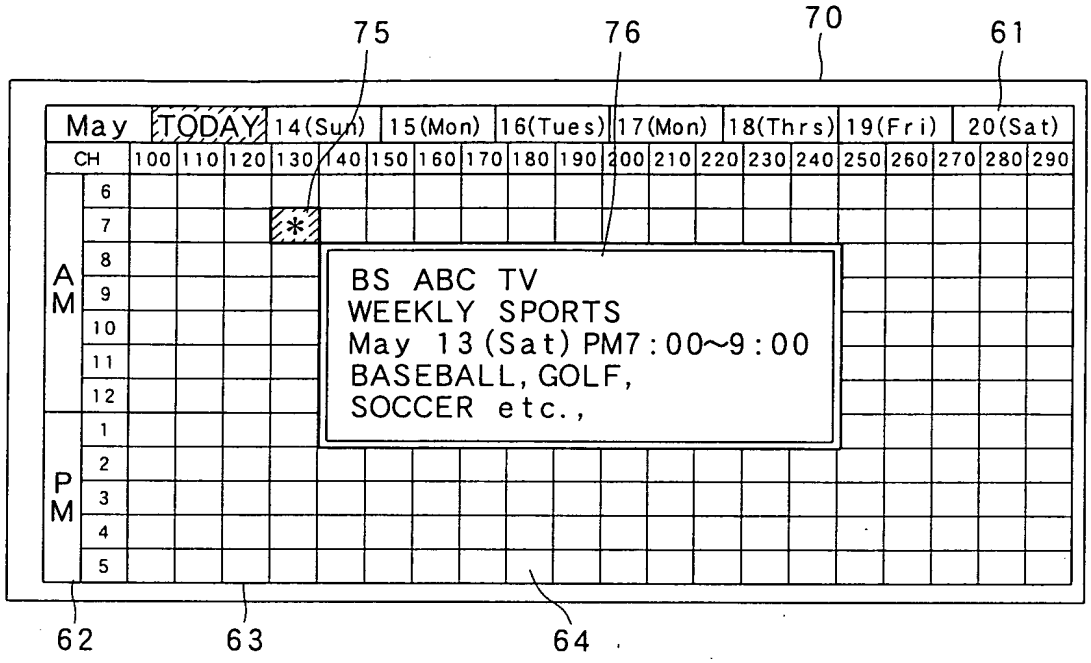

75
76
70
61
May
TODAY
14(Sun)
15(Mon)
16(Tues)
17(Mon)
18(Thrs)
19(Fri)
20(Sat)
CH
100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290
AM
6
7
8
9
10
11
12
PM
1
2
3
4
5
*
BS ABC TV
WEEKLY SPORTS
May 13(Sat) PM7:00~9:00
BASEBALL, GOLF,
SOCCER etc.,
62
63
64

FIG. 8A

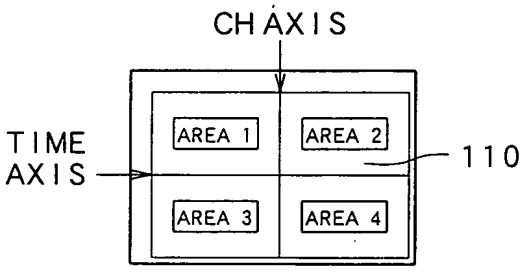


FIG. 8B

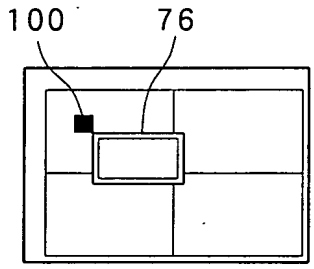


FIG. 8C

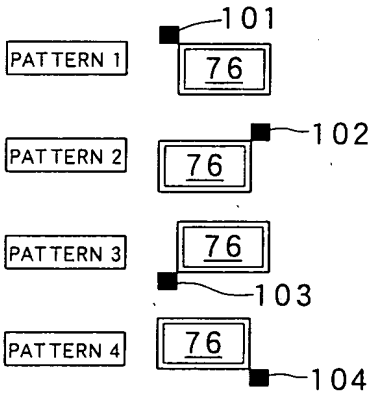


FIG. 8D

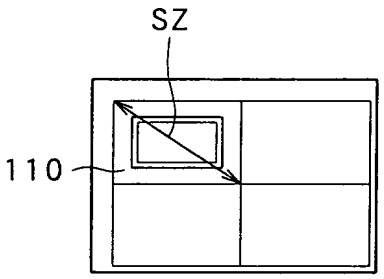


FIG. 9A

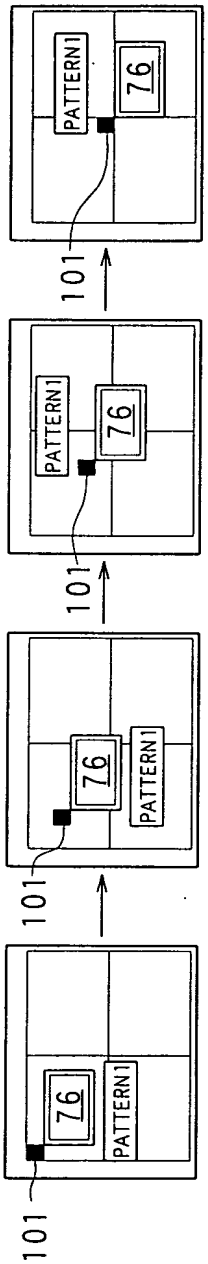


FIG. 9B

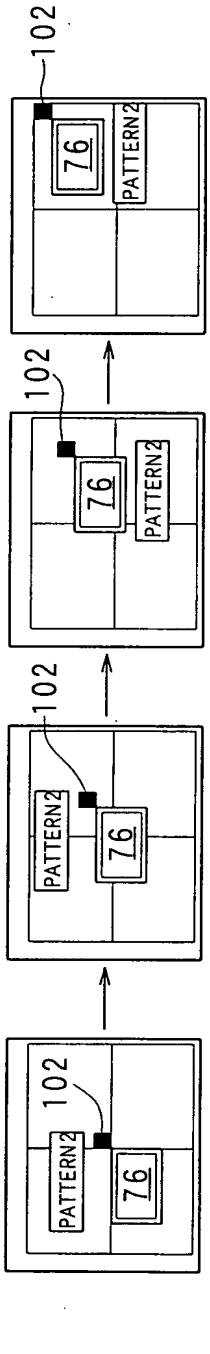


FIG. 9C

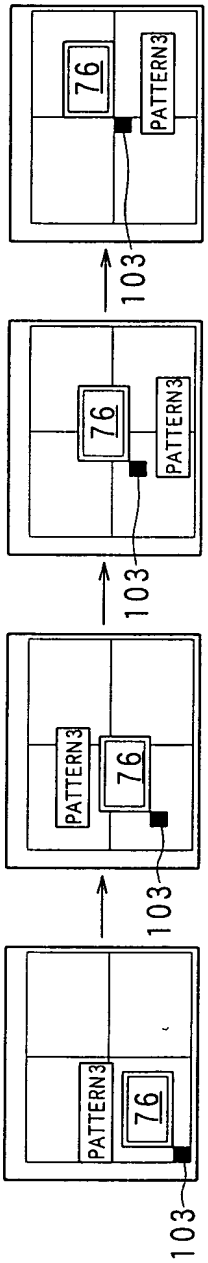


FIG. 9D

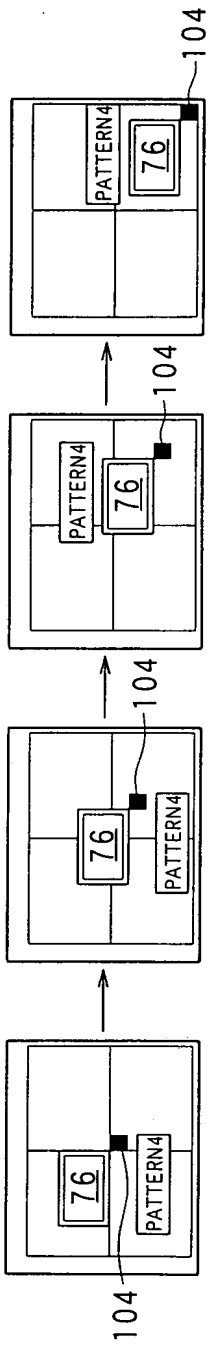


FIG. 10

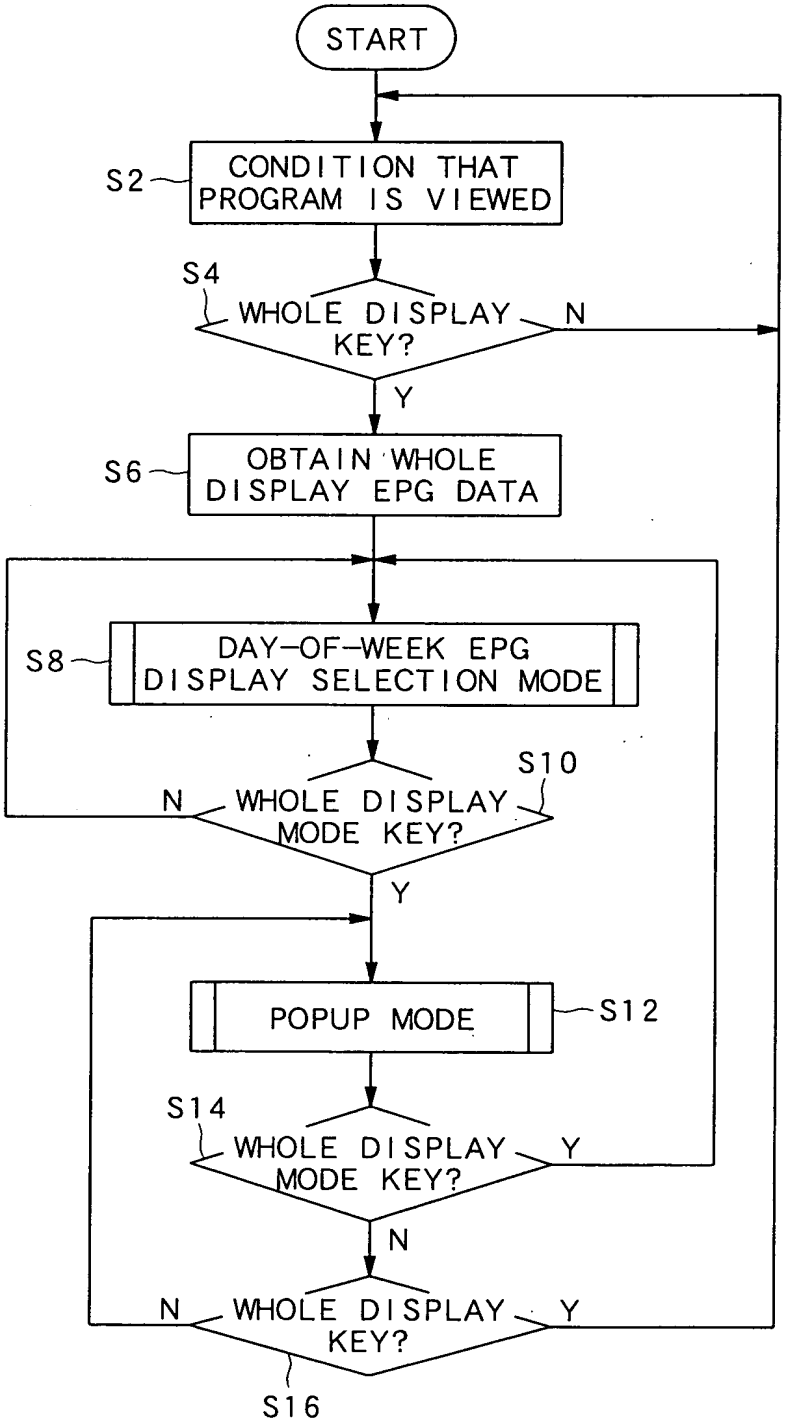

START
S2
CONDITION THAT PROGRAM IS VIEWED
S4
WHOLE DISPLAY KEY?
N
Y
S6
OBTAIN WHOLE DISPLAY EPG DATA
S8
DAY-OF-WEEK EPG DISPLAY SELECTION MODE
S10
N
WHOLE DISPLAY MODE KEY?
Y
POPUP MODE
S12
S14
WHOLE DISPLAY MODE KEY?
Y
N
N
WHOLE DISPLAY KEY?
Y
S16

FIG. 11

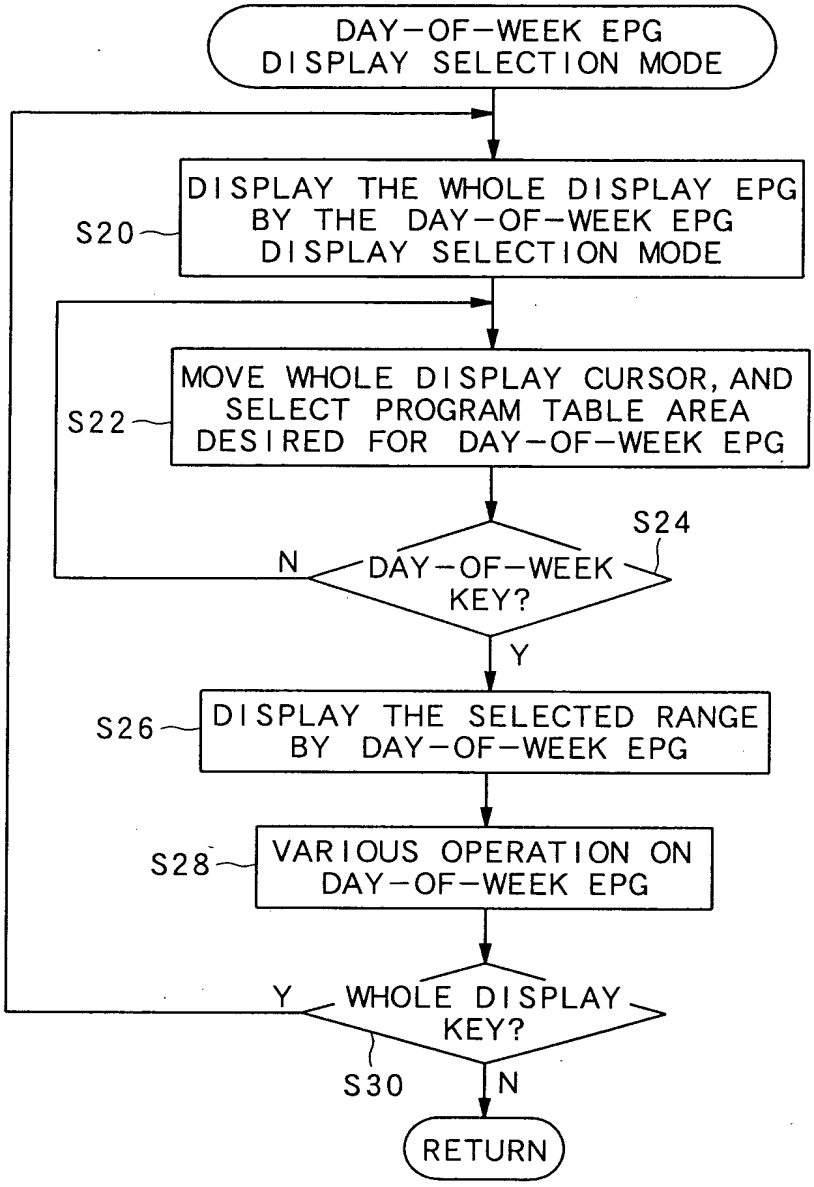
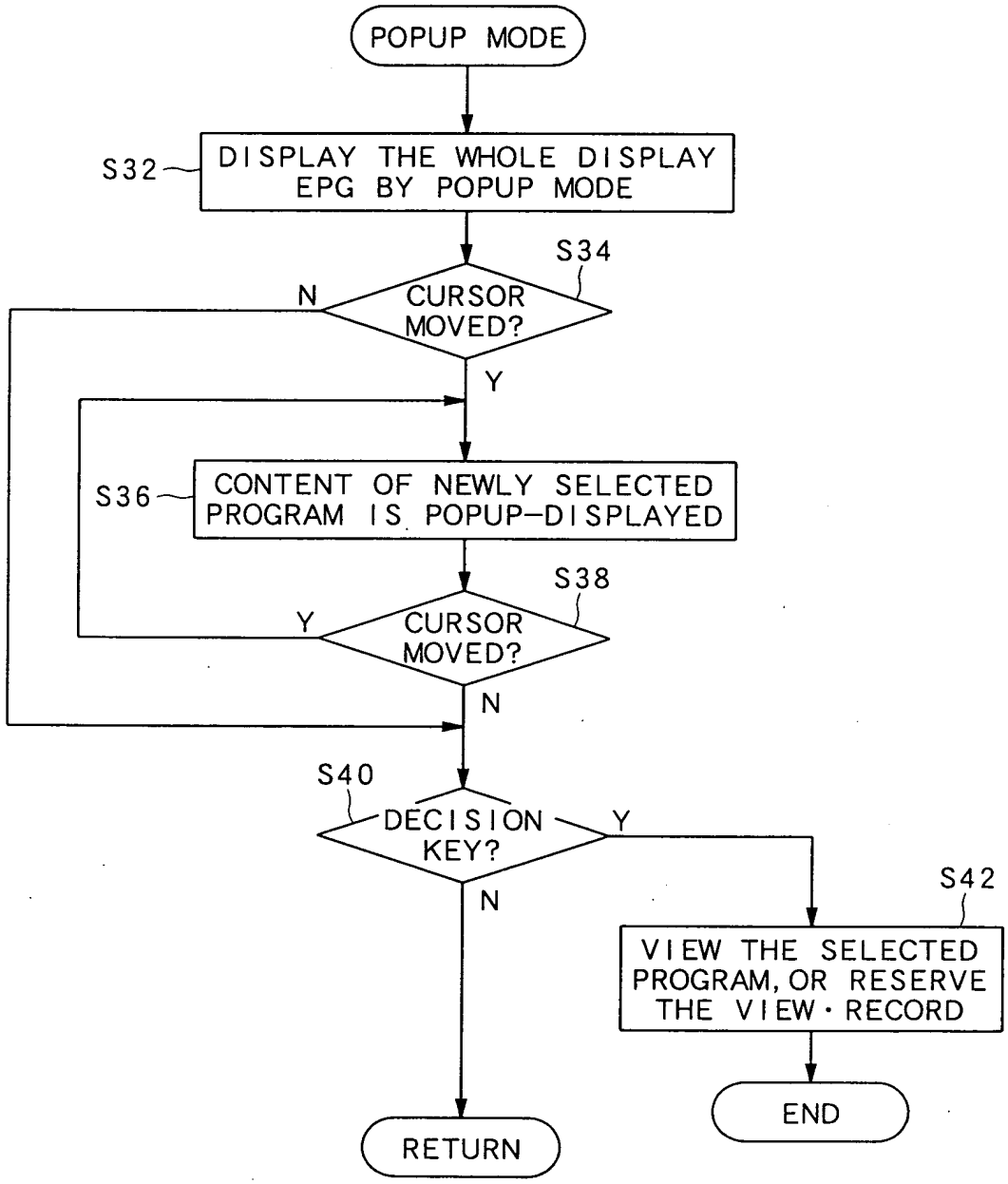

DAY-OF-WEEK EPG DISPLAY SELECTION MODE
S20
DISPLAY THE WHOLE DISPLAY EPG BY THE DAY-OF-WEEK EPG DISPLAY SELECTION MODE
S22
MOVE WHOLE DISPLAY CURSOR, AND SELECT PROGRAM TABLE AREA DESIRED FOR DAY-OF-WEEK EPG
S24
N
DAY-OF-WEEK KEY?
Y
S26
DISPLAY THE SELECTED RANGE BY DAY-OF-WEEK EPG
S28
VARIOUS OPERATION ON DAY-OF-WEEK EPG
Y
WHOLE DISPLAY KEY?
S30
N
RETURN

FIG. 12


POPUP MODE
S32
DISPLAY THE WHOLE DISPLAY EPG BY POPUP MODE
S34
CURSOR MOVED?
N
Y
S36
CONTENT OF NEWLY SELECTED PROGRAM IS POPUP-DISPLAYED
S38
CURSOR MOVED?
Y
N
S40
DECISION KEY?
Y
N
S42
VIEW THE SELECTED PROGRAM, OR RESERVE THE VIEW · RECORD
END
RETURN